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Canada

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D119-796-251
Job Sheet 197936



Part No: D119-796-251

Job Qty: 1 pcs

Part Name: Aft Crosstube Installation With Step (No Hardware)



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 7/18/19

Job Tracking No:

Due Date: 3/4/20

Created By: Marie Lajeunesse

Type: SOLD

Description: ORDER 17375

Note: DWG D119-796-251 REV F, IIN-D119-796 REV G IPP REV:A 14.09.09 NEW ISSUE DD VERF:JLM IPP
REV:B 14.10.15 AS PER REV.A DD VERF:JLM IPP REV:C 14.11.19 AS PER REV.C DD VERF:JLM IPP
REV:D 14.12.09 AS PER REV.PC6 DD VERF:JLM IPP REV:E 15.02.11 AS PER REV D JLM VERF:DD IPP
REV:F 17.12.11 REMOVE PACK KIT DD VERF:DP IPP REV:G 19.05.17 AS PER DWG REV.F DD VERF:JFS

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup	Run	Workcenter / Supplier	Lead Time	
100	Crosstubes - 1	1 pcs	3/4/20	3/4/20	0.50	4.17	Crosstubes - Bend		
110	QC 15	1 pcs	3/4/20	3/4/20	0.00	0.00	QC 15 - 12		
							QC 15 - 3		
							QC 15 - 47		
							QC 15 - 49		
							QC 15 - 58		
							QC 15 - 9		
							QC 15 - 68		
120	Crosstubes - 3 - B4B	1 pcs	3/4/20	3/4/20	0.00	3.30	Crosstubes - 1 - B4B		
							Crosstubes - 2 - B4B		
							Crosstubes - 3 - B4B		
							Crosstubes - 4 - B4B		
130	Crosstubes - 4 - B4B	1 pcs	3/4/20	3/4/20	0.00	1.28	Crosstubes - 1 - B4B		
							Crosstubes - 2 - B4B		
							Crosstubes - 3 - B4B		
							Crosstubes - 4 - B4B		
140	QC 7	1 pcs	3/4/20	3/4/20	0.00	0.00	QC 7 - 10		
							QC 7 - 13		
							QC 7 - 14		
							QC 7 - 15		
							QC 7 - 17		
							QC 7 - 18		
							QC 7 - 19		
							QC 7 - 2		
							QC 7 - 28		
							QC 7 - 3		
							QC 7 - 30		
							QC 7 - 34		
							QC 7 - 36		

Scrap
mup

Plex 7/18/19 1:20 PM Dart.lajeunesse.marie

				QC 7 - 37	
				QC 7 - 41	
				QC 7 - 47	
				QC 7 - 48	
				QC 7 - 51	
				QC 7 - 58	
				QC 7 - 59	
				QC 7 - 60	
				QC 7 - 9	
				QC 7 - 68	
				QC 7 - 50	
				QC 7 - 67	
				QC 7 - 40	
				QC 7 - 24	
				QC 7 - 43	
				QC 7 - 61	
				QC 7 - 81	
160	QC 5	1 pcs	3/4/20	0.00 0.00	QC 5 - 10
					QC 5 - 12
					QC 5 - 17
					QC 5 - 18
					QC 5 - 19
					QC 5 - 22
					QC 5 - 24
					QC 5 - 3
					QC 5 - 43
					QC 5 - 49
					QC 5 - 51
					QC 5 - 58
					QC 5 - 68
					QC 5 - 9
					QC 5 - 50
					QC 5 - 30
					QC 5 - 40
					QC 5 - 61
					QC 5 - 81
170	Outsource - 2 - NDT per QSI038	1 pcs	3/4/20		SKY002-VC 2
180	Packaging 2-1 - Receive - B4B	1 pcs	3/4/20	0.00 0.00	Packaging 2 - 1 - B4B
					Packaging 2 - 2 - B4B
					Packaging 2 - 3 - B4B
					Packaging 2 - 5 - B4B
					Packaging 2 - 4 - B4B
					Packaging 2 - 6 - B4B
					Packaging 2 - 7 - B4B
					Packaging 2 - 8 - B4B
					Packaging 2 - 9 - B4B
					Packaging 2 - 10 - B4B
					Packaging 2 - 11 - B4B
					Packaging 2 - 12 - B4B
					Packaging 2 - 13 - B4B
					Packaging 2 - 14 - B4B
					Packaging 2 - 15 - B4B
					Packaging 2 - 16 - B4B
					Packaging 2 - 17 - B4B
					Packaging 2 - 18 - B4B
					Packaging 2 - 19 - B4B
					Packaging 2 - 20 - B4B
					Packaging 2 - 21 - B4B
					Packaging 2 - 22 - B4B

						Packaging 2 - 23 - B4B	
						Packaging 2 - 24 - B4B	
						Packaging 2 - 25 - B4B	
						Packaging 2 - 26 - B4B	
						Packaging 2 - 27 - B4B	
						Packaging 2 - 28 - B4B	
						Packaging 2 - 29 - B4B	
						Packaging 2 - 30 - B4B	
						Packaging 2 - 31 - B4B	
						Packaging 2 - 32 - B4B	
						Packaging 2 - 33 - B4B	
						Packaging 2 - 34 - B4B	
						Packaging 2 - 35 - B4B	
						Packaging 2 - 36 - B4B	
						190 QC 6	1 pcs
QC 6 - 68							
QC 6 - 61							
QC 6 - 40							
200 Spray Paint - 2 - B4B	1 pcs	3/4/20	0.00	1.31	Spray Paint - 1 - B4B		
					Spray Paint - 2 - B4B		
					Spray Paint - 3 - B4B		
					Spray Paint - 4 - B4B		
210 QC 14	1 pcs	3/4/20	0.00	0.00	QC 14 - 15		
					QC 14 - 2		
					QC 14 - 34		
					QC 14 - 41		
					QC 14 - 51		
					QC 14 - 58		
					QC 14 - 59		
					QC 14 - 9		
					QC 14 - 68		
					QC 14 - 40		
					QC 14 - 19		
					QC 14 - 43		
					QC 14 - 24		
					QC 14 - 61		
					QC 14 - 81		
220 Crosstubes - 5 - B4B	1 pcs	3/4/20	0.00	3.30	Crosstubes - 1 - B4B		
					Crosstubes - 2 - B4B		
					Crosstubes - 3 - B4B		
					Crosstubes - 4 - B4B		
230 QC 5	1 pcs	3/4/20	0.00	0.00	QC 5 - 10		
					QC 5 - 12		
					QC 5 - 17		
					QC 5 - 18		
					QC 5 - 19		
					QC 5 - 22		
					QC 5 - 24		
					QC 5 - 3		
					QC 5 - 43		
					QC 5 - 49		
					QC 5 - 51		
					QC 5 - 58		
					QC 5 - 68		
					QC 5 - 9		
					QC 5 - 50		
					QC 5 - 30		
					QC 5 - 40		
					QC 5 - 61		

				QC 5 - 81	
240	Spray Paint - 3 - B4B	1 pcs	3/4/20	0.00 1.31	Spray Paint - 1 - B4B
					Spray Paint - 2 - B4B
					Spray Paint - 3 - B4B
					Spray Paint - 4 - B4B
250	Spray Paint - 4 - B4B	1 pcs	3/4/20	0.00 1.31	Spray Paint - 1 - B4B
					Spray Paint - 2 - B4B
					Spray Paint - 3 - B4B
					Spray Paint - 4 - B4B
260	QC 14	1 pcs	3/4/20	0.00 0.00	QC 14 - 15
					QC 14 - 2
					QC 14 - 34
					QC 14 - 41
					QC 14 - 51
					QC 14 - 58
					QC 14 - 59
					QC 14 - 9
					QC 14 - 68
					QC 14 - 40
					QC 14 - 19
					QC 14 - 43
					QC 14 - 24
					QC 14 - 61
					QC 14 - 81
290	Crosstubes - 6 - B4B	1 pcs	3/4/20	0.00 1.00	Crosstubes - 1
					Crosstubes - 2
					Crosstubes - 3
					Crosstubes - 4
300	QC 5	1 pcs	3/4/20	0.00 0.00	QC 5 - 10
					QC 5 - 12
					QC 5 - 17
					QC 5 - 18
					QC 5 - 19
					QC 5 - 22
					QC 5 - 24
					QC 5 - 3
					QC 5 - 43
					QC 5 - 49
					QC 5 - 51
					QC 5 - 58
					QC 5 - 68
					QC 5 - 9
					QC 5 - 50
					QC 5 - 30
					QC 5 - 40
310	Packaging 1-1 - Pick Kit - B4B	1 pcs	3/4/20	0.00 0.00	Packaging 1 - 1 - B4B
					Packaging 1 - 2 - B4B
					Packaging 1 - 3 - B4B
					Packaging 1 - 4 - B4B
					Packaging 1 - 5 - B4B
					Packaging 1 - 6 - B4B
					Packaging 1 - 7 - B4B
					Packaging 1 - 8 - B4B
					Packaging 1 - 9 - B4B
					Packaging 1 - 10 - B4B
					Packaging 1 - 11 - B4B
					Packaging 1 - 12 - B4B
					Packaging 1 - 13 - B4B
					Packaging 1 - 14 - B4B

				Packaging 1 - 15 - B4B	
				Packaging 1 - 16 - B4B	
				Packaging 1 - 17 - B4B	
				Packaging 1 - 18 - B4B	
				Packaging 1 - 19 - B4B	
				Packaging 1 - 20 - B4B	
				Packaging 1 - 21 - B4B	
				Packaging 1 - 22 - B4B	
				Packaging 1 - 23 - B4B	
				Packaging 1 - 24 - B4B	
				Packaging 1 - 25 - B4B	
				Packaging 1 - 26 - B4B	
				Packaging 1 - 27 - B4B	
				Packaging 1 - 28 - B4B	
				Packaging 1 - 29 - B4B	
				Packaging 1 - 30 - B4B	
				Packaging 1 - 31 - B4B	
				Packaging 1 - 32 - B4B	
				Packaging 1 - 33 - B4B	
				Packaging 1 - 34 - B4B	
				Packaging 1 - 35 - B4B	
				Packaging 1 - 36 - B4B	
320 QC 4	1 pcs	3/4/20	0.00 0.00	QC 4 - 28	
				QC 4 - 58	
				QC 4 - 69	
				QC 4 - 9	
				QC 4 - 46	
				QC 4 - 68	
				QC 4 - 72	
				QC 4 - 74	
				QC 4 - 75	
330 Packaging 3-1 - Stock - B4B	1 pcs	3/4/20	0.00 0.00	Packaging 3 - 1 - B4B	
				Packaging 3 - 2 - B4B	
				Packaging 3 - 3 - B4B	
				Packaging 3 - 4 - B4B	
				Packaging 3 - 5 - B4B	
				Packaging 3 - 6 - B4B	
				Packaging 3 - 7 - B4B	
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	

					Packaging 3 - 29 - B4B	
					Packaging 3 - 30 - B4B	
					Packaging 3 - 31 - B4B	
					Packaging 3 - 32 - B4B	
					Packaging 3 - 33 - B4B	
					Packaging 3 - 34 - B4B	
					Packaging 3 - 35 - B4B	
					Packaging 3 - 36 - B4B	
350 QC 21 - FG	1 pcs	3/4/20	0.00	0.00	QC 21 - FG - 21	
					QC 21 - FG - 70	
					QC 21 - FG - 53	

Part Op 100 - (CNC Alpha 160 Bender) Bend tube as per Dwg D119-796-241 using CNC bender program

Descriptions: 110 - (QC15- Crosstube Dimensional Check)

- 120 - ***** ENSURE PROPER JIG POSITIONING ***** 1-DRILL TUBE AS PER DWG USING DT10087 2- DRILL RIVET HOLES USING DT8787 FWD 3- DEBURR AND C'SINK RIVET HOLES AS PER DWG 4- FLIP TUBE, REPEAT STEP 2 AND 3 5- SCRIBE PART# AND BATCH# USING VIBRATING STYLUS ON INSIDE OF CUFF AS PER DWG D119-796-141
- 130 - 1- INSPECT AND REMOVE ALL MARKS FROM TUBE WITHIN LIMITS ON DWG D119-796-141 ***IMMEDIATELY AFTER GRINDING*** 2- PRESSURE WASH X-TUBE INSIDE AND OUT 3- ALODINE AND ACID ETCH X-TUBE INSIDE AND OUT AS PER QSI005. 4- Verify grinding marks By: _____
- 140 - (QC7-Inspect Chemical Conversion Coat)
- 160 - (QC5- Inspect part completeness to step on W/O)
- 170 - ISSUE P/O: _____ *** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE*** C OF C IS REQUIRED
- 180 - (Receive & Inspect for Damage & Mat'l Certs) Ensure copy of NDT results attached to work order.
- 190 - All purchased or subcontracted products
- 200 - ***VERIFY BY _____ BATCH # TO MATCH W/O _____ ***VERIFY BY _____ PART # TO MATCH W/O _____ ***MASK SCRIBE B# & P# AND VERIFY*** 1- Prime inside of tube. 2- Install nut plates as per dwg (D2873-043) 3- Mask cuffs, (grounding clamp DT10319) and all other location as per note#2, sheet 4. 4- Prime exterior of tube per QSI005. Primer Batch: _____
- 210 - (QC14- Inspect Spray Paint) ***VERIFY BY _____ BATCH # TO MATCH W/O _____
- 220 - Assemble as per dwg D119-796-241 and QSI 1- Abrade mating surfaces with Scotch Brite 7447 and clean with Dupont 4105s or equivalent as per dwg. 2- Install D5152-043 with proseal 890 on concave surface, 0.100" MIN thick as per dwg using DT10112 (identified right and left) (SEE NOTE 13) *****MAINTAIN CLAMPING PRESSURE ON FOR MIN 72HRS***** Proseal Batch: _____ EXP: _____ PROSEAL CURE TIME 72 HOURS: Start: _____ Finish: _____ 3- USE DT10304 PINS TO LOCATE SUPPORTS. INSTALL D5122-1 CENTER SUPPORT HAND TIGHT ONLY. DO NOT TORQUE. INSTALL RED TAG TO INDICATE "D5122-1 CENTER SUPPORT MUST BE BONDED PER IIN-D119-796 PRIOR TO FLIGHT".(SEE NOTE 9) 4- USE DT10304 PINS TO LOCATE SUPPORTS. Install Damper support and contact pads using proseal 890 per dwg and clamp in position. (SEE NOTE 12) Proseal Batch: _____ EXP: _____ PROSEAL CURE TIME 72 HOURS: Start: _____ Finish: _____ 5- INSTALL THE D5515-1 GROUNDING CLAMP AND ASSOCIATED HARDWARE PER DETAIL "C" PRIOR TO FINISHING. TORQUE THE MS21042-3 NUT 12-15 IN-LB. COMPLETELY SEAL THE EDGES OF THE CLAMP USING PROSEAL 890.
- 230 - (QC5- Inspect part completeness to step on W/O) ***VERIFY BY _____ BATCH # TO MATCH W/O _____
- 240 - ***VERIFY BY _____ BATCH # TO MATCH W/O _____ ***VERIFY BY _____ PART # TO MATCH W/O _____ ***MASK SCRIBE B# & P# AND VERIFY*** 1- Remove all non-fixed hardware and clean any excess proseal. 2- Scuff tube with Scotch Brite 7447. 3- Mask cuff and all other location as per note#2. 4- Prime as per dwg and QSI005 Primer Batch: _____ 5- Apply matte clear as per dwg and QSI005 Clear Batch: _____
- 250 - ***VERIFY BY _____ BATCH # TO MATCH W/O _____ ***VERIFY BY _____ PART # TO MATCH W/O _____ ***MASK SCRIBE B# & P# AND VERIFY*** 1- Mask underside of tube as per dwg. Mask cuff and all other location as per note#2. 2- Scuff tube with Scotch Brite 7447 3- Paint outside of crosstube Paint Batch: _____
- 260 - (QC14- Inspect Spray Paint) ***VERIFY BY _____ BATCH # TO MATCH W/O _____
- 290 - 1- Install step and clamp with the proper position per dwg D119-796-251 ***Torque all clamps to 50 IN-LBS max.*** 2- TRIM THE THREADED PORTION OF THE CLAMP LEAVING 1.5-4 THREADS IN SAFETY. BREAK SHARP EDGE 0.06 MAX. 3- Re-install non fixed hardware per dwg ***Torque clamps on damper and contact pad to 80-100 IN-LBS.*** 4- Apply a fillet-seal of proseal 890 around damper supports and contact pads. Proseal Batch: _____
- 300 - (QC5- Inspect part completeness to step on W/O) ***RE-CHECK TORCQUE ON CLAMP AS PER DWG.***
- 310 - (Pick Kit)
- 320 - (QC4- 100% Inspect kits for completeness)
- 330 - (Identify as per dwg & Stock Location: _____) Identify and pack for shipping as per PPP D119-796-251
- 350 - (QC21- Final Inspection - Work Order Release)

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D119-796-241TRN	Crosstube Turning Detail	1 pcs (1 ea)	100-Crosstubes - 1	5181104
CR3212-4-07	Cherry Rivet	16 Ea (16 ea)	200-Spray Paint - 2 - B4B	
D2873-043	Nut Plate Assembly	1 pcs (1 ea)	200-Spray Paint - 2 - B4B	
D5122-1	Center Support, Upper	1 pcs (1 ea)	220-Crosstubes - 5 - B4B	
D5123-1	Clamp Cushion	6 pcs (6 ea)	220-Crosstubes - 5 - B4B	
D5123-5	Clamp Cushion	2 pcs (2 ea)	220-Crosstubes - 5 - B4B	
D5134-041	Damper Support Assembly, LH	1 pcs (1 ea)	220-Crosstubes - 5 - B4B	
D5134-042	Damper Support Assembly, RH	1 pcs (1 ea)	220-Crosstubes - 5 - B4B	
D5136-1	Contact Pad, LH	1 pcs (1 ea)	220-Crosstubes - 5 - B4B	
D5136-2	Contact Pad, RH	1 pcs (1 ea)	220-Crosstubes - 5 - B4B	
D5152-043	Aft Post Mount Assembly	2 pcs (2 ea)	220-Crosstubes - 5 - B4B	
MS21920-25	Clamp	10 Ea (10 ea)	220-Crosstubes - 5 - B4B	
D5123-3	Clamp Cushion	4 pcs (4 ea)	220-Crosstubes - 5 - B4B	
D5515-1	Grounding Clamp	2 pcs (2 ea)	220-Crosstubes - 5 - B4B	
MS21042L3	Nut	2 Ea (2 ea)	220-Crosstubes - 5 - B4B	
MS27039-1-08	Screw	2 Ea (2 ea)	220-Crosstubes - 5 - B4B	
NAS1149D0332J	Washer	4 Ea (4 ea)	220-Crosstubes - 5 - B4B	
D5149-043	Aft Step Base Assembly	2 pcs (2 ea)	290-Crosstubes - 6 - B4B	
MS21920-28	Clamp	2 Ea (2 ea)	290-Crosstubes - 6 - B4B	
AN174-3A	Bolt	2 Ea (2 ea)	310-Packaging 1-1 - Pick Kit - B4B	
MS21042L4	Nut	2 Ea (2 ea)	310-Packaging 1-1 - Pick Kit - B4B	
NAS1149D0432J	Washer	4 Ea (4 ea)	310-Packaging 1-1 - Pick Kit - B4B	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Crosstubes - 1	D119-796-241TRN	1	4	0
200-Spray Paint - 2 - B4B	CR3212-4-07	16	219	0
	D2873-043	1	39	0
220-Crosstubes - 5 - B4B	D5122-1	1	4	0
	D5123-1	6	102	0
	D5123-3	4	143	0
	D5123-5	2	164	0
	D5134-041	1	4	0
	D5134-042	1	4	0
	D5136-1	1	10	0
	D5136-2	1	16	0
	D5152-043	2	0	0
	D5515-1	2	2	0
	MS21042L3	2	1,049	0
	MS21920-25	10	78	0
	MS27039-1-08	2	421	0
	NAS1149D0332J	4	3,141	0
290-Crosstubes - 6 - B4B	D5149-043	2	0	0
	MS21920-28	2	120	0
310-Packaging 1-1 - Pick Kit - B4B	AN174-3A	2	8	0
	MS21042L4	2	3,016	0
	NAS1149D0432J	4	176	0

Part Specifications

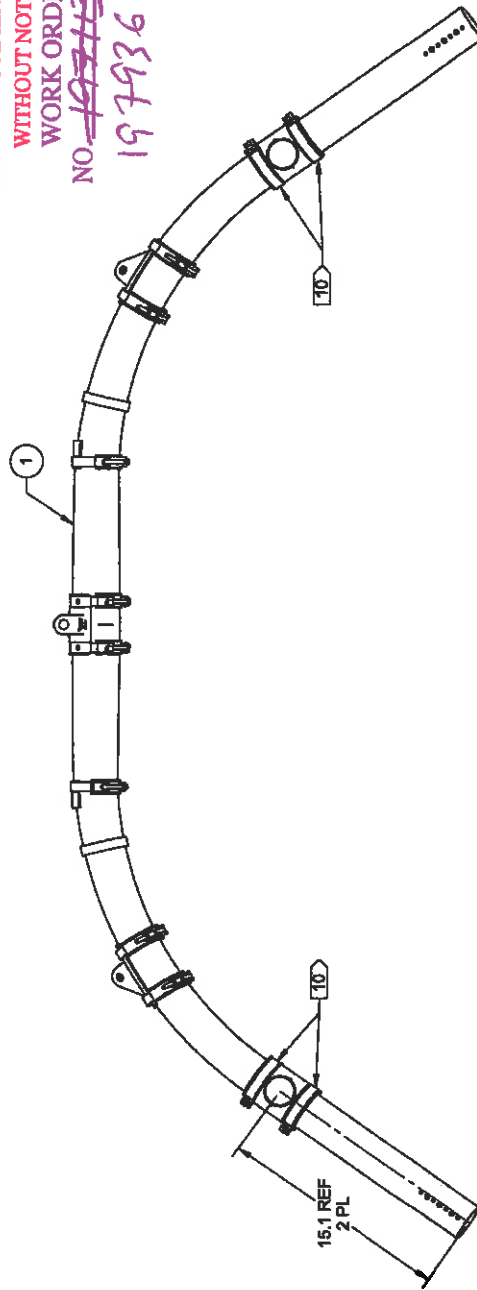
Specifications could not be found.

Plex 7/18/19 1:20 PM Dart.lajeunesse.marie

ITEM	QTY	P/N	DESCRIPTION
	X	D119-798-251	XTUBE ASSY (AW119 MKII AFT)
1	1	D119-798-241	XTUBE ASSY (AW119 MKII AFT)
2	4	D5123-3	CUSHION
3	2	D5149-043	AFT STEP ASSY
4	4	MS21920-25	CLAMP

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 SUBJECT TO AMENDMENT
 WITHOUT NOTICE
 WORK ORDER
 NO. ~~197936~~
 197936

JUL 04 2019



D119-798-251 XTUBE ASSY (AW119 MKII AFT)

- NOTES:
- 1) MATERIAL - N/A
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: N/A
 - 6) IDENTIFICATION: IDENTIFY PER DART QSI 044 METHOD 6.5
 - 7) WEIGHT: 29.9 LBS
 - 8) TORQUE MS21920-25 CLAMPS TO 60 IN-LBS MAX
 - 9) LOCATE STEP USING POST FITTING ON CROSSTUBE
 - 10) POSITION MS21920 CLAMPS SECURING THE STEPS AS SHOWN.
 - 11) THE THREADED PORTION OF THE CLAMP MUST FACE THE SAME DIRECTION AS THE STEP.
 - 12) TRIM THE THREADED PORTION OF THE CLAMP ALLOWING 1.5 - 4 THREADS IN SAFETY.
 - 13) BREAK SHARP EDGE 0.06 MAX.

RELEASED

2019 MAY 07
BY 19-705

APPROVED

F	ADD NOTE 11 (CAR18-288)	MW	19.04.05
E	MODIFY CLAMP ORIENTATION, ADD NOTE 10, REMOVED SECTION A-A (PAR18-527)	ML	17.02.10
D	D5123-3 WAS D5125-8, MS21920-28 WAS -20, ADDED SECTION A-A	AP	15.01.19
C	RE-DESIGN STEP INSTALLATION	DB	14.11.24
B	D2274 RADIUS BLOCK WAS D5153-1, ANWC12A WAS ANWC10A	AP	14.10.04
A	NEW ISSUE	AP	14.09.03
REV	DESCRIPTION	BY	DATE
DESIGN	AP		
DRAWN	MW		
CHECKED	ZF		
MFG. APPR.	JFS		
APPROVED	NO		
DE APPR.	CP		
DATE	19.04.05		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D119-798-251 REV. F SHEET 1 OF 1 TITLE XTUBE ASSY (AW119 MKII AFT) SCALE NTS CONFIDENTIALITY © 2014 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS NOT TO BE DISCLOSED OR REPRODUCED WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.			

Entered: _____ Date: _____

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

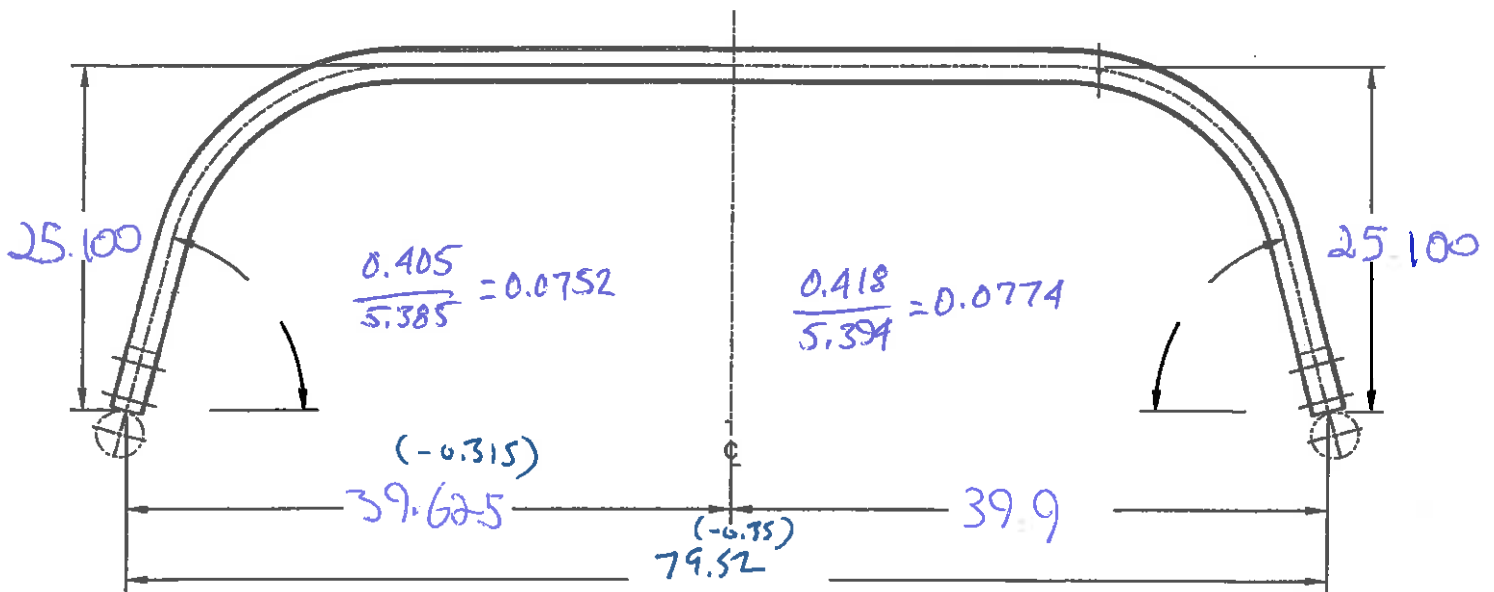
Route update only



DISPOSITION		DEPARTMENT/PROCESS			
Job: _____	Rework ☐	Skid-tube ☐	Cross tube ☐	Eng. (Non-AW) ☐	Engineering ☐
Part No. _____	Scrap ☒	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Water Jet ☐
	Use-as-is ☐	Large Fab ☐	Finishing ☐	Rec/Store/Packaging ☐	Supplier ☐
					Quality ☐
Date: 19/7/26	Sequence #: _____	QTY Affected: _____			
Description Work Order Deviation		Disposition			
Tube is over bent and uneven.		SCRAP. 9/14/26			
Root Cause		Completed By _____			
Operator ☐		Lead hand / Supervisor _____			
Manufacturing Process ☐		QC / QA Coordinator ☒			
Equipment/Tooling ☐		68 9-89			
Handling/Preservation ☐		JUL 30 2019			
Material ☐					
Product Improvement ☐					
Process Improvement ☐					
Human Factors ☐					
Other/Details: _____					
Fault Category					
Pressure/Forced ☐		Positioned Wrong ☐			
Bending ☐		Outside Tolerance ☐			
Crushing ☐		Drawing ☐			
Cracks ☐		Finish ☐			
Crimp/Kink/Ripple/Wave/Twist ☐		Part Lost/Missing ☐			
Marks/Chatter ☐		Misread ☐			
Mislabeled ☐					
Contamination ☐		Power Loss/Surge ☐			
Misaligned/off center ☐		Folio/Program ☐			
BOM/Route ☐		Grain Direction ☐			
Broken/Damage/Defect ☐		Weld ☐			
Incomplete/Unclear Instructions ☐		Wrong Stock Pulled ☐			
Drill Holes ☐		Out of Sequence ☐			
Fit/Function ☐		Off-set/Set-up ☐			

DART AEROSPACE LTD		Work Order:	
Description: Crosstube Aft, with Step		Part Number:	D119-796-241
Inspection Dwg: D119-796-241 Rev: K		Page 1 of 1	

Required Dimension	Min	Max
Height	24.840	25.100
1/2 Span	39.810	40.070
Angle	54°	57°
Total Span	79.620	80.140
Bending Passes	8	--
Crushing	--	8.5%



2,490
2.895

	Side A	Side B
Bending Passes		
Crushing	7.5%	7.7%
Comments		

2.488
2.906

QC15 Inspection	
Date	

Rev	Date	Change	Revised by	Approved
A	15.04.14	New Issue	KJ	
B	15.11.12	Min angle revised	KJ	
C	15.12.15	Dwg Rev updated	KJ	
D	17.07.12	Dwg Rev updated	KJ	
E	19.07.08	Dwg Rev updated	MG	